

CLAIMS

1. A fixing apparatus comprising:

a magnetic field generation section that generates
5 a magnetic field;

a magnetic field absorption section that is located
opposite said magnetic field generation section and
absorbs the magnetic field generated by said magnetic
field generation section; and

10 a heat-producing rotating element that is gripped
and rotated by a pair of pressure members so as to pass
between said magnetic field absorption section and said
magnetic field generation section and is induction-heated
by a magnetic field generated by said magnetic field
15 generation section and allows passage of magnetic field
energy,

wherein said heat-producing rotating element is made
of a nonmagnetic metallic material of thickness in a range
from 10 μm to 500 μm and specific resistance of 80×10^{-6}
20 Ωcm or less.

2. The fixing apparatus according to claim 1, wherein
said heat-producing rotating element has a conductive
layer on a surface.

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3. The fixing apparatus according to claim 2, wherein
said conductive layer is made of a metallic material with

specific resistance of $10 \times 10^{-6} \Omega \text{cm}$ or less.

4. The fixing apparatus according to claim 1, wherein said magnetic field generation section comprises:

5 an exciting coil; and

an exciting circuit having a high-frequency power supply that supplies predetermined power to said exciting coil, and

wherein a frequency of said high-frequency power supply is in a range from 20 kHz to 100 kHz.

5. The fixing apparatus according to claim 1, wherein said heat-producing rotating element has magnetic field energy permeability of 89% or more.

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6. An image forming apparatus comprising the fixing apparatus according to claim 1.